

REMARKS:

Claims 1-14 are pending in the present application.

In the Office Action dated January 12, 2006, the Examiner continued to reject all pending claims pursuant to 35 U.S.C. § 102 and/or 35 U.S.C. § 103 as being anticipated by or obvious in view of one or more of the following references: U.S. Patent No. 5,402,535 issued to Green; U.S. Patent No. 6,792,623 issued to Luppi; U.S. Patent No. 5,283,914 issued to James; and French Patent No. 2,614,538 issued to Grizard et al. Additionally, in the recent Office Action, the Examiner also cited U.S. Patent No. 3,438,060 issued to Lobelle as a reference that anticipates at least claim 1 of the present application.

Addressing first the rejection of claim 1 as being anticipated by U.S. Patent No. 5,402,535 issued to Green¹, Applicant again points out and emphasizes that this reference describes and claims an inflatable neck guard that provides emergency head and cervical support in the event of a rapid acceleration or deceleration of the human body, such as in military aircraft. See column 1, lines 38-49. The Examiner has asserted that Green describes an inflatable neck cuff at the lower portion of the hood, a neck cuff that exerts a sealing pressure against the neck of the wearer and prevents the hood from rising up relative to the head of the wearer. However, Green does not describe or teach any “hood.” Rather, the inflatable neck guard described by Green is a safety device that is separate and apart from the helmet worn by the pilot of the military aircraft. The respirator hood recited in claim 1 includes an inflatable

¹ In rejecting claim 1 as anticipated pursuant to 35 U.S.C. § 102(b), the Examiner initially cites U.S. Patent No. 5,402,535 issued to Green, but then identifies the reference as “Luppi” in the remaining discussion. Because the figure numbers and reference numerals cited by the Examiner correspond to the Green reference, not the Luppi reference, Applicant believes the reference to Luppi was in error and is responding accordingly.

neck cuff that is part of the hood, not a separate device. Accordingly, Applicant has amended claim 1 to clarify that the inflatable neck cuff is an integral part of the hood.

Furthermore, in the present invention, a preferred hood, including the inflatable neck cuff, is constructed of a flexible material, such as that marketed and distributed by E.I. duPont de Nemours and Company of Wilmington, Delaware under the trademark Tychem®. Even if the helmet described by Green could somehow be characterized as a “hood,” it certainly could not be described as flexible. Accordingly, Applicant has further amended claim 1 to clarify that the respirator hood is flexible.

Claim 1 was also rejected as being anticipated by U.S. Patent No. 3,438,060 issued to Lobelle, a reference cited for the first time in the Office Action dated January 12, 2006. However, Lobelle also describes a helmet with “a rigid shell” as opposed to a hood. See column 2, lines 4-5. Furthermore, the inflatable tube 19 that serves as a neck seal in Lobelle is separate and apart from the helmet. Therefore, Applicant submits that this reference, like the Green reference, fails to anticipate the respirator hood as recited in claim 1 (as amended).

Applicant recognizes that the Examiner has also rejected claim 1 as being obvious in view of U.S. Patent No. 6,792,623 issued to Luppi and U.S. Patent No. 5,283,914 issued to James. However, Applicant respectfully submits that the above-described amendments have also resolved any obviousness issues.

Similar to the Green reference, Luppi describes a rigid helmet. This helmet is used in artificial respiration for patients with a medical condition that requires assisted breathing. Such a helmet is readily distinguished from the flexible hood recited in claim 1. Furthermore, this rigid helmet does not include an inflatable neck cuff, but rather an inflatable “bag” with a lower

portion that is gathered around the neck of a patient. See column 3, lines 21-24; and Figures 6-7. This bag essentially fills “dead space” within the helmet, “with a consequent better reactivity of the system which, in assisted ventilation, allows the ventilator to detect promptly the pressure drop at the beginning of inspiration....” See column 3, lines 25-28. Even if this bag could properly be characterized as an inflatable neck cuff, Luppi does not include any teaching or suggestion regarding the inflation of its bag to a size sufficient to exert a sealing pressure against the neck of the wearer. Rather, Luppi describes the use of a separate deformable sealing collar 11 that rests on the shoulders of the wearer. Similarly, Luppi does not include any teaching or suggestion regarding the use of an inflatable neck cuff to prevent the helmet from rising relative to the head of the wearer, as recited in claim 1. Indeed, Luppi implicitly concedes that its bag does not serve this purpose by describing the use of straps “to produce a firm coupling of the helmet to the patent, avoiding the unpleasant phenomenon of lifting during use.” See column 1, lines 14-16.

Similarly, U.S. Patent No. 5,283,914 issued to James describes another rigid protective helmet for use in the mining or quarrying industries. See column 1, lines 42-45. James does not teach or suggest the inflation of a neck cuff a size sufficient to exert a sealing pressure against the neck of the wearer, nor is there any teaching or suggestion regarding the use of an inflatable neck cuff to prevent the helmet from rising relative to the head of the wearer. For these reasons, even assuming that that the Luppi and James references could be properly combined, they still fail to teach each and every limitation of claim, and thus, the obviousness rejection is improper.

For these reasons, Applicant respectfully submits that claim 1 is in condition for allowance. Furthermore, claims 2-7 depend from claim 1, and therefore, are also now believed

to be in condition for allowance.

Claim 8 is similar to claim 1 in that it recites a respirator hood with an inflatable neck cuff positioned near a lower portion of the hood that provides a sealing pressure against the neck of the wearer and prevents the hood from rising up relative to the head of the wearer. Furthermore, claim 8 includes the limitation that the hood includes “one or more overhead channels which define an air delivery path from the air source over the head of the wearer to the interior of the lens and downwardly across the face of the wearer.” The Examiner has continued to reject this claim as being obvious, asserting that “it would have been obvious [sic] skilled in the art to modify the respirator hood of Luppi, to include a lens and multiple overhead channels....” Applicant respectfully disagrees.

First, Applicant contends that neither Luppi nor James teaches a “hood.” As emphasized above, Luppi does not describe or teach any “hood,” but rather a rigid helmet used in artificial respiration for patients with a medical condition that requires assisted breathing. Similarly, James describes a rigid protective helmet for use in the mining or quarrying industries. Such protective helmets can not be fairly characterized as the “hood” recited in claim 8.

Secondly, it is well-settled that a claimed invention can “not be obvious without a demonstration of the existence of a motivation to combine those references at the time of the invention.” National Steel Car Ltd. v. Canadian Pacific Railway Ltd., 69 USPQ2d 1641, 1654-55 (Fed. Cir. 2004), citing Ecolochem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361, 1371, 56 USPQ2d 1065 (Fed. Cir. 2000). In this case, there is no such motivation. Luppi teaches the use of a bag to fill “dead space” within the helmet, and thus, defines a limited breathing zone. Accordingly, air flows from an inlet port 8 on one side the helmet to an outlet port 9 on the other

side of the helmet in front of the face of the wearer. In other words, the breathing zone is already defined and established, so why would one of ordinary skill in the art be motivated to propose an alternate technique for directing air to the breathing zone, one that would needlessly re-direct air flow to the back and then over the head of the wearer? In trying to articulate a motivation for combining the references, the Examiner suggests that it would be desirable "for the purpose of providing means for introducing a filtered air supply between the wearer's face and the lens of a visor." However, this already accomplished by Luppi. Again, in Luppi, air flows from an inlet port 8 to an outlet port 9, passing through a limited breathing zone in front of the face of the wearer. There simply is no motivation for one of ordinary skill in the art to propose an alternate technique for directing air to the breathing zone

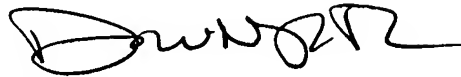
For the reasons set forth above, claim 8 is also believed to be in condition for allowance. Furthermore, claims 9-13 depend from claim 8, and therefore, are also now believed to be in condition for allowance.

Finally, claim 14 was previously added to the present application. Claim 14 is very similar to claim 8, but specifically characterizes the hood as a "flexible" hood. The preferred flexibility of the hood is discussed above with reference to claim 1. In the Office Action dated January 12, 2006, the Examiner did not specifically comment on this limitation or provide any indication where such a limitation is found in the cited prior art. Thus, claim 14 is also believed to be in condition for allowance.

Therefore, Applicant respectfully requests allowance of the claims now pending in the present application. If after reviewing this response there are continuing concerns, the undersigned counsel would welcome the opportunity to speak with the Examiner and/or the

Supervisory Examiner to discuss possible resolutions to any remaining issues and/or to clarify issues for appeal.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. W. Nagle, Jr.', with a stylized flourish at the end.

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